<u>**Amendments to the Claims:**</u>

This listing of claims will replace all prior versions, and listings, of claims in the application:

<u>**Listing of Claims:**</u>

1.   (Currently Amended) A method for presenting event associations between events from one or more event flows on a display screen of a computer, comprising:

<u>parsing at least one log file to generate the event associations and to suppress non-associated events, wherein the at least one log file comprises the events from the one or more event flows;</u>

<u>constructing multiple sequence diagram representations at lower levels in</u> [[of]] a <u>first</u> sequence diagram <u>representation, wherein a user drills down from the first sequence diagram representation to the lower levels, and wherein the first sequence diagram representation and the multiple sequence diagram representations show interactions arranged in a time sequence for methods, objects, classes, threads, and processes</u>, ~~wherein the sequence diagram representation comprises a top node associated with a machine or a process~~;

generating event pairs between the events from the one or more event flows, wherein said <u>first</u> sequence diagram representation comprises timelines for said event flows and directional paths between said timelines for said event associations<u>, and wherein the multiple sequence diagram representations comprise a level of detail between objects located on threads in the first sequence diagram representation that are collapsible, wherein the event pairs are selected according to predetermined parameters</u> ~~and wherein said sequence diagram representation comprises a higher level and a lower level, wherein a user drills down from the top node associated with the higher level to the lower level in the sequence diagram representation to view the events~~; and

displaying said sequence diagram representation on said display screen.

2.   (Currently Amended) The method of claim 1 further comprising providing a graphical user interface for selecting the level of detail for said <u>first sequence diagram representation and the multiple sequence diagram representations</u> ~~sequence diagram representation;~~ <u>and</u> wherein <u>the first sequence diagram representation and the multiple sequence diagram representations show thread, process, and machine boundaries.</u> ~~higher level and the lower level comprise at least one process level sequence diagram, at least one thread level sequence diagram, at least one class level sequence diagram, and at least one object level sequence diagram.~~

3.	(Currently Amended) The method of claim 2, wherein content for said level of detail is established by a predetermined relationship model for said event flows.[[;]]

~~responsive to the user clicking on the top node assigned to the machine or the process, linking to the lower level.~~

4.	(Currently Amended) The method of claim 1, further comprising generating said event associations by selecting associated events from said event flows in accordance with one or more predetermined parameters, wherein the predetermined parameters include time of occurrence.

~~the sequence diagram representation presents event associations from multiple logs; and~~

~~non-associated events are excluded by filtering the non-associated events.~~

5.	(Currently Amended) The method of claim 4 wherein ~~said predetermined parameters include time of occurrence.~~ the event associations are presented from multiple logs.

6.	(Currently Amended) The method of claim 1, parsing the at least one log file to generate the event associations and to suppress non-associated events further comprises; ~~wherein said event flows are logs.~~

linking call and return message events to produce the event associations.

7.	(Previously Presented) The method of claim 1, wherein said sequence diagram is a universal modeling language ("UML") sequence diagram.

8.	(Currently Amended) A method for presenting event associations between events from one or more event flows on a display screen of a computer, comprising:

parsing at least one log file to generate the event associations and to suppress non-associated events, wherein the at least one log file comprises the events from the one or more event flows;

generating said event associations by selecting associated events from said event flows in accordance with one or more predetermined parameters, wherein the predetermined parameters include time of occurrence;

constructing multiple sequence diagram representations using Unified Modeling Lanugage (UML) at lower levels in a first sequence diagram representation, wherein a user drills down from the first sequence diagram representation to the lower levels, and wherein the first sequence diagram representation and the multiple sequence diagram representations show interactions arranged in a time sequence for methods, objects, classes, threads, and processes;

generating event pairs between the events from the one or more event flows, wherein said first sequence diagram representation comprises timelines for said event flows and directional paths between said timelines for said event associations, and wherein the multiple sequence diagram representations comprise a level of detail between objects located on threads in the first sequence diagram representation that are collapsible, wherein the event pairs are selected according to predetermined parameters, and wherein content for said level of detail is established by a predetermined relationship model for said event flows; and

displaying said sequence diagram representation on said display screen.

~~A system for presenting event associations between events from one ore more event flows on a display screen, said system including memory and an input device, said system comprising:~~

~~a processor coupled to said display, memory, and input device and adapted for:~~

~~constructing a sequence diagram representation wherein the sequence diagram representation comprises a top node associated with a machine or a process;~~

~~generating event pairs between the events from the one or more event flows, wherein said sequence diagram representation comprises timelines for said event flows and directional paths between said timelines for said event associations, and wherein said sequence diagram representation comprises a higher level to the lower level in the sequence diagram representation to view the events and the event pairs; and~~

~~displaying said sequence diagram representation on said display screen~~

9-28.   (Canceled)